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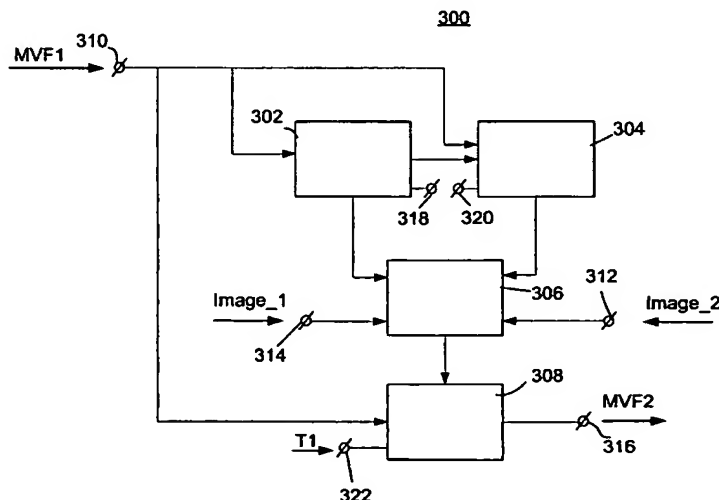
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(54) Title: MOTION VECTOR FIELDS REFINEMENT TO TRACK SMALL FAST MOVING OBJECTS



(57) Abstract: A conversion unit (300) for converting a first motion vector field (MVF 1) into a second motion vector field (MVF2) is disclosed. The first motion vector field being computed, on basis of a first image and a second image of a sequence of images, for a temporal position between the first image and the second image, The conversion unit (300) comprises: first establishing means (302) for establishing a first group of un-referenced pixels in the first image; second establishing means (304) for establishing a second group of un-referenced pixels in the second image; computing means (306) for computing a match error of a candidate motion vector, which is oriented from the first group of un-referenced pixels to the second group of un-referenced pixels; and comparing means (308) for comparing the match error with a predetermined match threshold and assigning the candidate motion vector to the first one of the motion vectors of the second motion vector field if the match error is below the predetermined match threshold.



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